HD CCTV Total Solution

IR Bullet Camera User Manual

The product image shown above may differ from the actual product.
Please use this camera with a DVR which supports HD video recording.
Please read the instructions thoroughly before using the product.

CAUTION

RISK OF ELECTRIC SHOCK

CAUTION:

To reduce the risk of electric shock, do not expose this apparatus to rain or moisture.

Only operate this apparatus from the type of power source indicated on the label.

The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

RoHS conform

ROHS Announcement

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

CE

CE Mark

This apparatus is manufactured to comply with the radio interference.

The company does not warrant that this manual will be uninterrupted or error-free. We reserve the right to revise or remove any content in this manual at any time.

FEATURES

1. 1/2.7" CMOS Sensor
2. 1080P video output
3. Low light sensitivity of 0.1 Lux / F1.4(Wide)~F2.8(Tele), 0 Lux (IR LED ON)
4. Day and night 24-hour surveillance with IR effective distance up to 25 meters
5. IP66 for weather-proof application

PACKAGE CONTENT

- IR camera
- User manual
- Sun shield
- Installation Sticker
- Accessory

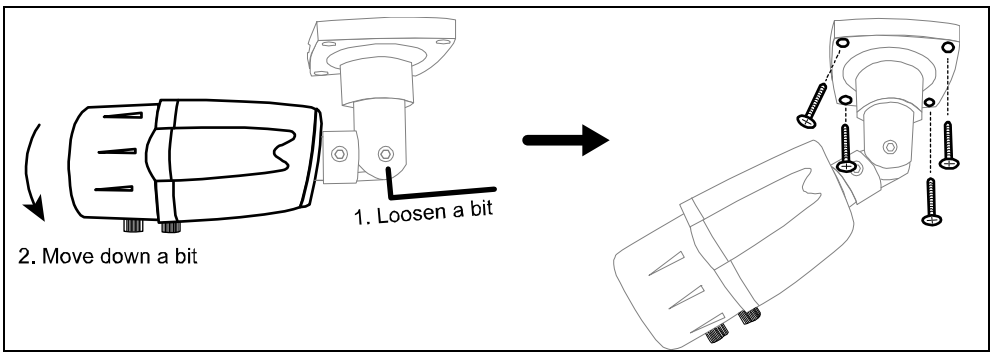
SPECIFICATIONS*

Pick-up Element	1/ 2.7" CMOS image sensor
Number of Pixels	1930(H) x 1088(V)
Video Frame Rate	1080P@30fps / 1080P@25fps
Min. Illumination	0.1 Lux / F1.4(Wide)~F2.8(Tele), 0 Lux (IR LED ON)
S/N Ratio	More than 48dB (AGC OFF)
Shutter Speed	1/30 (1/25) sec ~ 1/720000 (1/600000) sec
Lens	f2.8 ~ 12mm / F1.4 ~ F2.8
Lens Angle	Wide: 104° (Horizontal) / 56° (Vertical) / 124° (Diagonal) Tele: 35° (Horizontal) / 20° (Vertical) / 40° (Diagonal)
IR LED	36 units
IR Effective Distance	Up to 25 meters
IR Shift	YES
Day & Night Mode	YES
IRIS Mode	AES
White Balance	AUTO / USER / PUSH / 8000K / 6000K / 4200K / 3200K
AGC	Adjustable
Sharpness	Adjustable
Flickerless	50HZ / 60HZ / OFF
BLC	Adjustable
IP Rating	IP66
Operating Temperature	-20℃ ~ 40℃
Video Output	1.0 Vp-p composite, 75Ω
Power Source (±10%)	DC12V / 0.5A
Current Consumption (±10%)	400mA

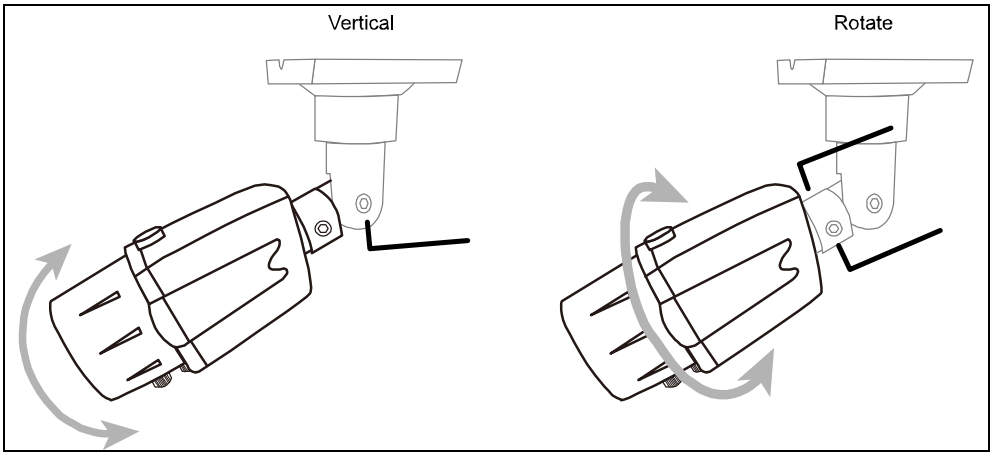
* The specifications are subject to change without notice.

INSTALLATION

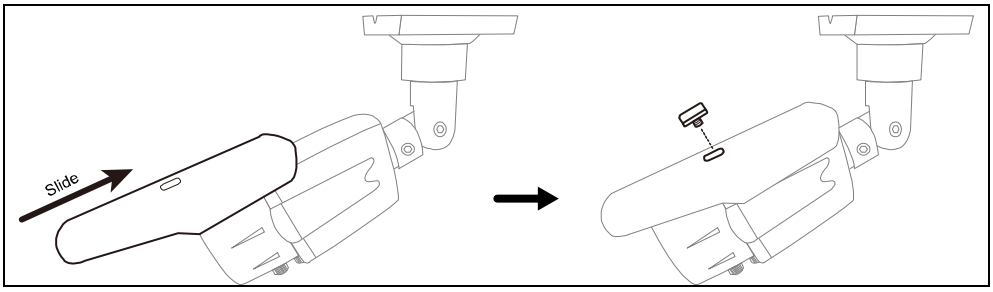
Step1: Loosen the screw as indicated below to move down the camera lens.
Then, locate where to install this camera, and fasten the camera to the ceiling or wall.



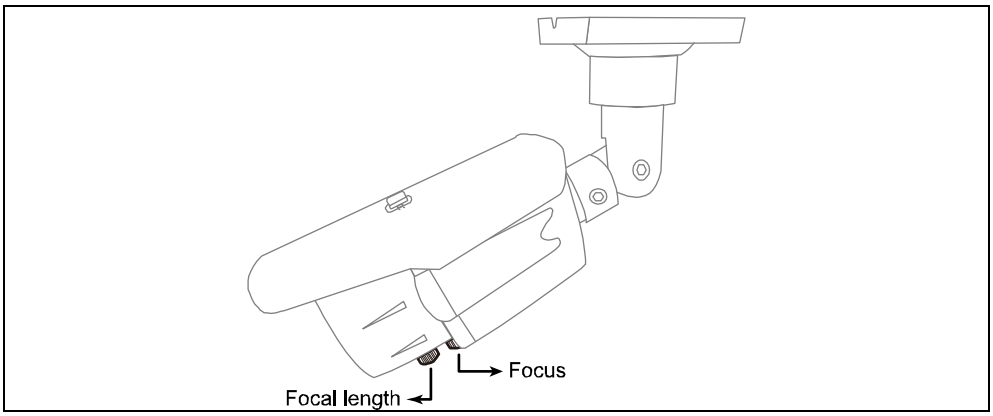
Step2: Adjust the viewing angle of the camera as indicated below.



Step3: Slide the sun shield to the camera, and fasten it with the supplied screw.



Step4: Power on the camera, and adjust the focal length and focus by turning the screws as indicated below.



CONNECTION

1. DC12V Input Terminal
   Connect the power terminal of the camera to a DC 12V regulated power supply.

NOTE: Please use the correct power adaptor, DC12V (regulated), to operate this unit. The power tolerance of this unit is DC12V ± 10%. Over maximum DC 12V power input will damage this unit.

2. Video Output Connector (VIDEO OUT)
   Connect the camera video output to the video input of a DVR with 75Ω coaxial cable.

NOTE: To ensure the camera has sufficient protection against moisture, an extra waterproof measure, such as by using an insulating tape, must be used to cover the power and video connectors after connection.

CAMERA PARAMETERS

This camera series has its own configuration menu, and either of the two methods below is available to access the menu based on the camera model you have.

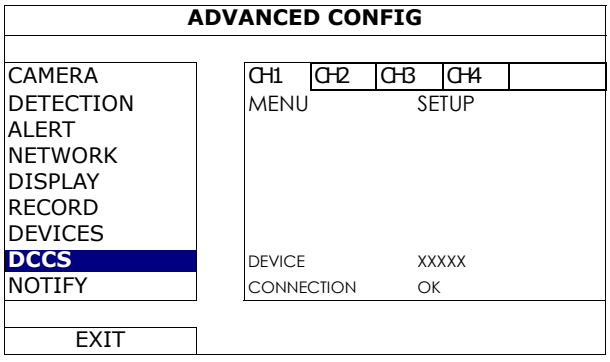
NOTE: The methods below are available only when the camera is used with our brand's HD CCTV DVR.

- **Method 1**

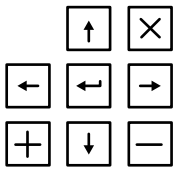
  On the DVR live view, click the channel which connects this camera to display in the full screen mode, and select .

- **Method 2**

  On the DVR live view, right click to show the DVR main menu, and select "ADVANCED CONFIG" → "DCCS". Then, select the channel which connects this camera, and click "SETUP" to enter the menu of camera parameters.



When the camera menu is entered, you'll see the keys on the bottom right corner to move between and change those configurations.



←→↑↓ Move between selections or change settings.

↵ Enter the currently-selected item.

X Quit the camera parameters mode.

MENU			DESCRIPTION
DAY / NIGHT	MODE	EXT / COLOR / B&W / AUTO	Set the day & night mode among EXT, COLOR, B & W, and AUTO.
	D TO N	1 ~ 63	Set the sensitivity for the day & night mode from day to night.
	N TO D	1 ~ 63	Set the sensitivity for the day & night mode from night to day.
	DELAY TIME	1 ~ 60	Set the delay time after which the day and night switch is made.
AWB	MODE	AUTO / USER / (PUSH) / 8000K / 6000K / 4200K / 3200K	Set the white balance mode among AUTO, USER, (PUSH), 8000K, 6000K, 4200K, 3200K, and HOLD.
	R-G GAIN	1 ~ 255	Adjust the ratio between red and green.
	B-G GAIN	1 ~ 255	Adjust the ratio between blue and green.
AE	MODE	ESC / HOLD / DC	Set the exposure mode among ESC, HOLD, and DC.
	BRIGHT	0 ~ 255	Set the level of brightness to adjust the brightness of the image.
	SHUTTER	AUTO / 1/25 / 1/30 / 1/50 / 1/60 / 1/100 / 1/ 120 / 1/250 / 1/500 / 1/1000 / 1/3000 / 1/10000	Set the shutter speed for exposure.
	FLICKER	OFF / 50HZ / 60HZ	Enable this function to enhance the flicker situation.
	BLC	0 ~ 16	Set the level of Back Light Compensation to adjust the image to compensate for an area that is overpowered by brightness because of excessive light.
	AGC	1 ~ 5	Set the level of Auto Gain Control to automatically adjust the image when the light level changes.
	LSC	ON / OFF	Enable or disable Lens Shading Correction to correct the phenomenon of vignetting when the focal length is short.
SPECIAL	PRIVACY	AREA SEL. / MASK PAT. / SX / EX / SY / EY	Set to cover certain areas on the camera image.
	MOTION	MOTION / SENSITI. / ALARM / HOLD TIME	Set certain areas for motion detection.
	HLC	HLC / MASK VALUE / THRESHOLD	Set to suppress strong backlight for clearer images.
EFFECT	COLOR GAIN	0 ~ 255	Set the level of gain.
	COLOR HUE	0 ~ 71	Set the level of hue.
	SHARPNESS	0 ~ 255	Set the level of sharpness to enhance the clarity of image detail by adjusting the aperture and sharpening the edges.
	CONTRAST	0 ~ 255	Set the level of contrast.
	BRIGHT OFF.	-128 ~ 127	Set the level to compensate the brightness of the image.
	MIRROR	OFF / ON	Enable to rotate the images horizontally based on your installation situation when necessary.
	FLIP	OFF / ON	Enable to rotate the image 180° when necessary.

MENU			DESCRIPTION
SYSTEM	CAMERA ID	0 ~ 255	Set the camera ID.
	ID DISP.	OFF / ON	Enable or disable the display of the camera ID.
	NAME DISP.	OFF / ON	Enable or disable the display of the camera name.
	LANGUAGE	ENG / 中文	Select the language of the menu: English / Simplified Chinese.
	FACTORY INIT	OFF / ON	Enable to restore the camera parameters to factory default values.